

APPENDIX A

Nantahala and Pisgah National Forests

Land and Resource Management Plan

Amendment 10

August 1, 2000

Page III-25, add the following:

Activities	General Direction	Standards
Botanical, Wildlife, and Fish Resource Management (continued)	14. For counties listed by the USDI Fish and Wildlife Service (FWS) as having current summer occurrences or likely occupied summer habitat of Indiana Bat, apply the following management direction.	
	14(1). Minimize the risk of incidental take during timber management practices of harvest/regeneration or stand improvements. Conduct surveys in suitable forest types using FWS protocols for the Indiana bat that show the species is not present, or implement the following standards in suitable habitat forest types for timber management practices of harvest and regeneration or stand improvements.	a. Retain standing live trees that have more than 25 percent exfoliating (separated from cambium) bark and are greater than 3 inches dbh. b. Retain as many shellbark, shagbark, and bitternut hickories as practicable, regardless of size or condition (live, dead, or dying). c. Retain as many standing snags greater than 3 inches dbh as practicable within regeneration and timber treatment units, regardless of species, unless

specifically marked for removal.

d. Retain as many hollow, den, or cavity trees greater than 9 inches dbh as practicable.

e. Designate and retain living residual trees in the vicinity of one-third of all large (>12 inches dbh) snags with exfoliating bark to provide them with partial shade and some protection from wind throw, using trees from the Priority Leave Tree list when possible.

f. Conduct prescribed burns between October 15 and April 15 when possible. Protect leave trees and snags to the extent practicable during site preparation burns. Site preparation burns, when necessary before October 15, should be conducted after August 15 to prevent potential harm to non-volant young.

g. Inspect timber sales to ensure these standards are implemented. Report findings, including a pre and post harvest inventory of Indiana bat habitat components.

h. Design regeneration units with irregularly shaped boundaries where feasible, so that some uncut live trees project into the regeneration unit.

14(2). Conserve Indiana bat habitat along intermittent

a. Limit openings in the upper canopy to single tree

and perennial streams. Conduct surveys in suitable forest types using FWS protocols for the Indiana bat that show the species is not present, or implement the following standards in suitable habitat forest types if timber management practices of harvest and regeneration or stand improvements are needed.

gaps within 30 feet each side of intermittent streams. Require at least 75 feet distance the distance between openings. Leave trees from the Priority Leave Species List (see Appendix C, Biological Opinion for Indiana bat, March 2000), when possible. For crossings, apply the management standards for riparian areas (Management Area 18).

b. Use Indiana bat summer habitat as a riparian related value for delineation of riparian areas (Management Area 18). Within the first 30 feet on each side of perennial streams and other permanent water bodies, no standing trees (green, dead, dying, or leaning) shall be removed or felled. Retain a minimum of 60 percent canopy cover in the remainder of the riparian area with leave trees being first selected from the Priority Leave Tree Species List. For crossings, apply the standards for riparian areas (Management Area 18).

14(3). Minimize the risk of incidental take for all management activities. Conduct surveys in suitable habitat forest types using FWS protocols for the Indiana bat that show the species is not present, or implement the following

a. Protect all active roost trees.

standards in suitable forest types for all management activities

- b. Retain standing snags during personal-use firewood permits, unless marked for removal
- c. Removal of standing snags between April 15 and October 15 that are habitat shall be evaluated by qualified personnel for Indiana bat occupancy using FWS protocols. Consult with FWS if Indiana bats are found.
- d. Consult with FWS about any activities that involve modification of habitat or potential adverse disturbance between April 15 and October 15 within a 1.5 mile radius of known maternity sites.
- e. Consult with FWS for use of *B.t.* or other nonselective pesticides to control gypsy moth infestations or other forest pest insects. Reduction in nontarget lepidoteran abundance will be considered when developing spraying plans, especially when determining the size and configuration of spray blocks.
- f. Notify FWS of any dead, injured, or sick specimens of any endangered species.

14(4). Conserve Indiana bat habitat for all management activities. Conduct surveys in suitable habitat forest

- a. Analyze the pre and post project condition for activities impacting five or more acres of forest stands

types using FWS protocols for the Indiana bat that show the species is not present, or implement the following standards in suitable habitat forest types for timber management practices of harvest and regeneration or stand improvements.

(this does not include linear projects), using the index described in Appendix D of the Biological Assessment for Indiana Bat (10/18/1999). Do not let any project or combination of projects decrease the HSI by more than 5 percent for the duration of the FWS Biological Opinion on Indiana bat. Consult with FWS if the HSI decreases more than 5 percent.

14(5). Continue forest plan monitoring efforts to determine use by Indiana bats.

- a. Survey biennially at sites where Indiana bats are present (documented occurrences) following FWS survey protocols.
- b. Consult with FWS if an Indiana bat hibernaculum is found. Conduct biennial surveys of a hibernaculum after gating to determine the effects of the gate(s).
- c. Characterize and quantify habitat at all sites where Indiana bats are documented.
- d. Report survey results to FWS within 6 months of completion.
- e. Report the amount of incidental take annually and within 6 months following the end of the previous year's activities.

14(6). Definitions.

- a. Standing trees are those that are not root sprung.
- b. Practicable is defined as not intentionally

removing. This term does not apply to activities where removal of trees must occur, such as roads, skid trails, cable lanes, landings, rights of way, and other similar activities.

- c. Snags can be marked for removal if it does not provide or is not expected to provide suitable Indiana bat roosting or maternity habitat.
- d. An intermittent stream has a continuous well defined channel that flows 30 to 90 percent of the time. It may not be flowing during a very dry year. Typically, the stream flows when the water table rises above the channel bottom.

14(7). Transition period. Decisions made after October 18, 1999 shall comply with the management direction and standards of this amendment (Amendment 10).

15. Continue Forest Plan monitoring efforts to determine use of the national forests by Indiana bat during hibernation, summer roosting/maternity, and prehibernation seasons.

15(1). Work with the FWS, Survey biennially if Indiana

universities, the North Carolina Resources Commission, and local experts to locate and survey caves and mines that may contain Indiana bats.

bats are present following the protocol of the Indiana Bat Recovery Team.

Reinitiate consultation with FWS if an Indiana Bat hibernaculum is found on or within 5 miles of the national forests.

15(2). Collaborate monitoring efforts with research to refine our understanding of the distribution and abundance of the Indiana Bat on the national forests. Follow FWS recommendations for monitoring in the Biological Opinion (p69, 7b).

16. Update the conservation objectives (Forest Plan, p A-3) after developing a conservation strategy for the recovery of Indiana bat. Use information from the Indiana bat recovery plan, the conservation recommendations outlined in the biological opinion, and monitoring information.